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Ethics of Artificial Intelligence

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AI Ethics Field Guide

TikTok's recommendation algorithm has become key to the way the platform shapes user experience by delivering a constant stream of short videos with content tailored to each user. Fundamentally, this AI- driven system uses machine learning to analyze large amounts of engagement data like watch time, shares, comments, and likes, to estimate what videos each user is the most likely to engage with (Lynch, 2025; Enrich Labs, 2025). This content organization process happens primarily on the “For You” page (FYP), the default feed, since this is where most users spend the majority of their time. The recommendation algorithm is the core of the TikTok experience and the app’s success. However, when examined through AI ethics pipeline, model optimization, data collection, downstream impacts, and deployment design, the ethical risk becomes more clear.

The first decision point occurs during the data collection stage. TikTok is constantly collecting data based on behavior, including small interactions that users may not recognize as impactful. As Zuboff (2019) argues that in her theory of surveillance capitalism, platforms draw out behavioral data not just to predict user preferences but to also shape future behavior for profit. This is where the harm begins; users do not always purposefully consent to the scale of data extraction that fuels personalization.

It begins by showing new content to a small group of users and based off their engagement; it expands to larger audiences, but only if early metrics, especially watch time and interactions, are strong. The system constantly updates its predictions in real time, based on continuous user behaviors (Lynch, 2025). Furthermore, the feedback loop creates increasingly strained, personalized content feeds that reflect user interests. TikTok's system also incorporates metadata like captions, trending sounds, hashtags, and interaction patterns to continue improving its recommendations (Enrich Labs, 2025). Since TikTok keeps detailed aspects of how the algorithm lays out signals private, the internal decision-making process remains a “black box” for most users that do not care to investigate how it works.

This leads us to the second decision point that happens at the model optimization stage. TikTok’s algorithm is designed to increase engagement, especially retention and watch time (Enrich Labs, 2025). This reflects a business incentive. When engagement becomes the primary objective, the system learns to intensify addictive content or emotionally stimulating. The harm at this point involves narrowed exposure to diverse perspectives, reinforcement loops, and habit conditioning which encourages prolonged use.

The third and final point makes an appearance in the deployment design. Application features like infinite scrolls and autoplay removes natural break or stopping cues, which intensifies the algorithm's influence. These interface decisions contribute to “doomscrolling” and can learn unhealthy patterns of dependency (Lynch, 2025). The long-term impacts mainly affect users, especially teenagers, that may experience diminished autonomy over their attention and increased risks of mental health strain, like addiction. In addition, with every interaction there is more persoanl data being captured and analyzed without getting full informed consent.

Ultimately, TikTok's algorithm embellishes a core ethical tension between manipulation and personalization. The system does not only respond to user preferences, but it actively shapes them, raising serious concern about informed consent, autonomy, and the concentration of power in the platforms' design.

References

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